Environmental Contaminants

Environmental Contaminants	2004 Actual	2005 Enacted	Uncontrollable & Related Changes (+/-)	Program Changes (+/-)	2006 Budget Request	Changes from 2005 (+/-)
Environmental Contaminants $(000)	10,659	10,901	+235	-2,649	8,486	-2,415
FTE	*98*	*99*	*+1*	*0*	*99*	*0*
CAM	[608]	[6]			[6]	[+0]
Environmental Contaminants $(000	**10,659**	**10,901**	**+235**	**-2,649**	**8,486**	**-2,415**
FTE	***98***	***99***	***+1***	***0***	***99***	***0***

Program Overview

Conservation through Cooperation, Communication and Consultation

The Environmental Contaminants (EC) program uses a cooperative and collaborative approach with other federal agencies, states, tribes, local governments, foreign governments and private citizens to identify and minimize contaminant related risks in the environment and to restore resources injured by contamination. EC contributes directly to the Department of Interior's Strategic Plan Resource Protection Goal of *Improving the Health of Watersheds and Landscapes Under DOI Management or Influence* by implementing strategies to restore and maintain the proper function of watersheds and landscapes. The EC program is also preparing a strategic plan for defining long term goals which will clearly describe the breadth and integration of EC program activities within the Service and DOI. This strategic plan is scheduled to be completed in FY 2005 and will more clearly define the program's activities and will focus program activities on the DOI Strategic Plan and Service operating procedures.

Within this context, the EC program focuses on four priority areas:

- Identifying contaminant sources and appropriate management methods
- Restoring habitats and communities impacted by contaminants
- Providing technical services to others
- Preventing and pre-planning to reduce contamination spills/events and provide accelerated responses to contaminant releases

The Service contributes directly to the DOI Resource Protection End Outcome Goal of *Sustaining Biological Communities on DOI Managed and Influenced Lands and Waters*. Service specialists collaborate with federal, State, and local entities, non-governmental organizations and private citizens to conserve species and communities through technical assistance and review of management plans for species and their habitats. EC specialists also evaluate, modify and develop appropriate testing methodologies and procedures to determine impacts of contaminants on individual species and on biological communities. The Service monitors impacts of contaminants on trust resources through special studies on and off Service lands. These studies support management decisions on the conservation of trust resources.

The Service builds on past efforts to identify and work with partners on habitat restorations tied to the Natural Resource Damage Assessment and Restoration program. Restoration funds recovered through Natural Resource Damage Assessment cases can be leveraged to increase the amount of habitat restored

and to speed up the pace of restorations. The leveraging of efforts is done in coordination with other Service programs (such as the Partners for Fish and Wildlife and the Endangered Species Recovery programs), as well as other federal and state agencies and non-governmental organizations.

Use of Cost and Performance Information

The Environmental Contaminants Program has been using performance based information for several years in its resource allocation process.

- EC provides informational support to other divisions and agencies such as toxicological reports to the Endangered Species Program (Water Quality Criteria and Standards and pesticide registration); the National Wildlife Refuge System for Refuge cleanups, contaminant investigations, contaminant assessment and assist them with Integrated Pesticide Management; the U.S. Coast Guard and U.S. EPA during hazardous material and/or oil spills so that issues may be addressed in a timely fashion. Our efficiency will be improved by further completing and implementing our strategic plans long-term goals and further coordinating and communicating these efforts within the Service and outside client agencies.
- EC uses contractors for chemical analysis because they are a more cost effective means to obtain necessary information. We maintain the highest quality data by working closely with the contractors before, during and after analysis through strict QA/QC protocols.
- Performance information is used to allocate resources in the Investigations part of the program. Proposals are evaluated based on scientific merit, management outcomes, trust resource impacts and a score based on the five-year Regional Performance. If Regions do not complete investigations in a timely fashion, their allocation is impacted. Through the Peer Review process, we prioritize the on and off Service land investigations, refuge cleanups and contaminant assessments. This process ensures that the work being performed meets the needs of the Service and maintains the high quality and scientific integrity of the data for effective management decisions.
- The use of Activity Based Costing will provide the appropriate avenue to report our accomplishments and accurately document our efforts while further aiding our identification, prioritization, and utilization of our recognized expertise.

The third priority is the provision of technical assistance to the EPA, Tribes, states, and local entities on the development and evaluation of National Pollution Discharge Elimination System permits and the Total Maximum Daily Loads requirements of the Clean Water Act by fulfilling data needs regarding contaminant-related impacts to Service lands and other habitats associated with trust resources by program specialists. These activities support the conservation of trust resources by reducing or eliminating threats on and off Service lands. The Service through the EC program also collaborates with other federal, State, and local agencies to review and formulate management plans for watersheds on Service lands.

EC also works collaboratively to determine the sources and impacts of known and suspected contaminants on and off Service lands. For example, there are 176 known hazardous waste sites on National Wildlife Refuges with 14 currently undergoing remediation (see below). EC technical expertise aids managers to make decisions that eliminate or minimize these identified problems. EC personnel are integrated into spill prevention activities and actively participate in local and regional responses and planning for oil spills and hazardous material releases, as well as oil spills and hazardous material drills. Through timely identification of environmentally sensitive areas and effective contingency planning, EC specialists help protect trust resources while significantly increasing the efficiency of responses to oil spills and hazardous substance releases.

Realignment of Priorities

As a result of a FWS management review, the Environmental Contaminants Program is proposing a strategic realignment, refocusing efforts on restoration activities with the Natural Resource Damage

Assessment and Restoration in FY 2006. The Program will obtain additional funding from the Restoration Fund to cover the approximately 27 FTE's that are currently associated with lower priority EC activities in FY 2006. The redirection will result in increased restoration of wildlife and habitats impacted by oil and hazardous substance releases for which settlements exist in the Fund. In FY 2006 we expect that $200 million will be available for restoration work and expect that the Program can increase the acres of habitat restored by 167 percent, the number of stream miles restored by 175 percent, the number of biological populations restored by 50 percent and the number of settlements having a recreational component by 150 percent. The exact locations of the projects that will be completed are not known at this time, because the Service Regions and the Natural Resource Damage Assessment and Restoration Program must complete further analysis of the settlements and agreements among co-trustees to identify projects that are ready for implementation. The majority of the settlements that may be available for this work are found in the Northeast, Midwest and on the West Coast.

It is our intention to reprioritize the work of a large number of EC Biologists to offset the proposed base funding reductions, refocusing their efforts to restoration projects that will result in efficient use of settlement dollars. Assigning additional EC Biologists to NRDAR restoration projects would result in the loss of some lower priority capabilities within the EC Program.

In 2005, EC will work closely with NRDAR, with FWS Regional and Field Offices, as well as co-trustees, to identify restoration projects that will be ready for implementation beginning in 2006. In particular, FWS will be able to focus efforts on developing innovative approaches to bundling smaller, older settlements to maximize the ecological benefits of restoration projects.

2004 Program Performance Accomplishments

Activities conducted by the Environmental Contaminants program can generally be broken into 3 main categories: **Investigation**, **Prevention**, and **Restoration**. The EC program investigates the ecological impacts of oil spills and hazardous materials releases into the environment. We attempt to prevent these impacts from occurring in the first place by working with our partners to minimize or eliminate releases of these substances into the environment and we restore habitats that have been impacted by contamination.

Investigation

In FY 2004 EC specialists completed 10 clean up projects on national wildlife refuges, 34 contaminant investigations on refuges and 22 contaminant investigations off refuges. One off refuge investigation with several partners including the Western Washington Fish and Wildlife Office, Washington Department of Fish and Wildlife, Canadian Wildlife Service, British Columbia Ministry of Environment, Trumpeter Swan Society, Ducks Unlimited, and wildlife rehabilitation facilities investigated large trumpeter swan die-offs in Whatcom and Skagit Counties, Washington and Sumas Prairie, British Columbia during the 2003/2004 winter. From November 1999 through March 2004, at least 1,325 wintering trumpeter and tundra swans died of acute lead shot poisoning; 402 of these swans died during the 2003/2004 winter. Using the most recent swan populations estimates, this wintering population has suffered a loss of nearly 7.5 percent and is a continuing threat to the population. The goal is to identify and cleanup lead shot contaminated areas and remove the threat from the wintering swan population as well as all other wildlife which use the areas.

EC Specialists partnered with the U.S. Geological Survey's Biological Resources Division on investigations of deformed chickadees in southcentral Alaska. Since 1998, over 1,200 reports of

chickadees and 200 other species of birds with deformed bills were reported in Alaska. Currently, analysis is underway to determine the possible contribution of contaminants to this phenomenon.

Oil Spills - The Service received 13,873 oil spill reports, of which we evaluated 7,662. We had 1,034 oil spill report follow-ups, and 606 oil spills on and/or affecting national wildlife refuges. An example of the level of effort is found in the Lafayette, LA Field Office which alone evaluated, followed-up, or responded to at least 140 oil and hazardous substance spills. As the result of those efforts, at least 10,000 acres of wetland habitats and approximately 150 river/stream miles were protected; those efforts potentially benefited thousands of birds and innumerable aquatic organisms.

Hazardous Materials Releases - EC specialists received 8,752 hazardous material spills reports, requiring 3,903 evaluations, 267 follow-up investigations, 35 spill site visits and 16 active Service participations in a spill response. Of these, 30 hazardous material spills occurred on or impacted national wildlife refuges. One example of a hazardous spill occurred in March 2004, at the Thermo Fluids Inc. facility in Oregon where there was a release of 750 gallons of sulphuric acid into a nearby creek. Over the next several days federal, state, and local biologists collected over 1,800 dead fish, including several adult steelhead and numerous lamprey ammocoetes. The Service is leading natural resource damage assessment and restoration settlement negotiations with the responsible party, and on behalf of the local watershed council submitted several projects to restore nearby riparian habitat for resident and anadromous fish species. The company responded positively to the restoration package and the trustees anticipate funding of the projects.

Prevention

Pre-Spill Contingency Planning - To ensure our preparedness in the case of an oil spill, 255 oil spill drills were held across the nation. One of the largest and most significant spill drills occurred in California in April. Two dozen EC and Endangered Species biologists from the Carlsbad, Ventura, and Sacramento Fish and Wildlife Offices, supported by Regional Spill Response Coordinators from Portland and the California-Nevada Operations Office, as well as a national team in Washington, D.C., participated in the 2004 Spill of National Significance (SONS) Drill. This exercise provided significant benefits to the Service participants by allowing them to experience, in an exercise setting, the challenges they would face in the event a major spill resulted in significant environmental effects and injuries to natural resources.

Pesticide use - EC specialists provided technical expertise on 1,508 pesticide use proposals and 392 integrated pest management actions for the National Wildlife Refuge System. To help streamline the pesticide use proposal review process, a national online database is being developed. This process was developed to assure that the most effective and least toxic method of pest control is used on Service lands and in Service projects. Environmental Contaminants personnel provided technical support on herbicide use by federal and state agencies in their efforts to improve habitat for federally listed species and thereby helped prevent unnecessary impacts to Service lands and facilitated continued control of invasive species. EC specialists also consulted on 373 pesticide use and registrations packages. Early consultations, such as these, help prevent wildlife deaths by identifying problem pesticides before they are widely used.

Water Quality Criteria Development - The Service conducted 4,863 Clean Water Act reviews, 516 Section 7 consultations on the CWA, and 53 acts of technical assistance to tribes on the CWA. These actions typically involve coordination with local municipalities, state agencies and other federal partners. EC program involvement in Clean Water Act implementation includes national consultation on EPA's water quality criteria, consultation on state water quality standards, review of NPDES permits, and technical assistance. Through these mechanisms the Service helps to ensure that

measures to prevent water pollution are sufficient to protect DOI trust resources that live in or rely on the nation's waters.

Restoration

In FY 2004, 30 new natural resource damage assessments (for a total of 182) were completed by the Service's Environmental Contaminants program. An example of a recently completed damage assessment is the $4 million settlement with the owners and insurers of the *New Carissa*, a bulk freighter that went aground on the Oregon coast near the entrance to Coos Bay in 1999. After 4 days of pounding in the violent surf, the vessel began leaking oil, releasing an estimated 70,000 to 140,000 gallons of bunker and diesel oil before the ship was towed offshore and sunk in about 11,000 feet of water. The Service joined with other State and Federal agencies in assessing the impact of the oil spill on coastal resources. Over 1,300 bird carcasses, including 28 threatened marbled murrelets, were collected during this incident. It is estimated that 2,360 seabirds and shorebirds were killed, including 262 marbled murrelets. In addition, 17 oiled snowy plovers, another threatened species, were captured, cleaned, and eventually released back into the environment. The Trustees are now in the process of determining the amount of restoration necessary to return bird populations to their former levels. Across the country, 93 restoration plans are under development to compensate the public for injuries to natural resources caused by oil spills and hazardous waste releases. All plans will undergo public review, and most are prepared in partnership with state and Federal co-trustees.

The Service was notified of a significant bird mortality event in central Florida at Lake Apopka. Law Enforcement requested support from an EC Biologist to aid in investigating the potential causes of mortality in several threatened and endangered species (bald eagles, wood storks, and peregrine falcons) and migratory birds. The EC Program funded the initial investigation through base funding. The EC biologist determined that organo-chlorine pesticides were the cause of mortality which was substantiated by three independent certified veterinary pathologists. This investigation was an integral part of the Department of Justice's criminal and civil cases against the responsible parties. This process led to a cooperative agreement with the Responsible Party to provide for the protection of over 8,600 acres of upland, wetlands and riverine habitat, along with cooperative avian protection plans. An EC biologist is currently providing oversight of the clean up of 13,000 acres of land for migratory bird habitat. The $100,000 base funding provided from the EC Program for the investigation ultimately resulted in $39 million for the restoration project.

Nationally, the Service is currently participating in 74 damaged habitat restorations funded by natural resource damages settlements. Restoration actions were completed for 18 Restoration Plans in FY04. One such settlement, reached for the Vertac site in Arkansas, 1991, resulted in approximately $650K to reforest 2,000 acres of bottomland hardwoods at the Bald Knob NWR. Planting has occurred over the past three years and continued with an additional 360 acres in FY2004. In addition, a water control structure is being constructed and will eventually lead to the creation of approximately 4,000 to 5,000 acres of open and forested wetlands. The reforestation efforts and creation of wetlands will provide habitat for numerous species of migratory birds including some listed bird species.

In FY 2004 there were 69 Restoration projects being implemented by responsible parties with oversight of EC biologist and 10 such projects were completed. One example is the settlement for release of PCBs into Fox River and Green Bay, Wisconsin with Georgia-Pacific (formerly Fort James Corporation) which was finalized in March 2004. Production of carbonless paper resulted in the release of polychlorinated biphenyls, which injured fish and fish-eating birds in the area. This settlement included the preservation of 1,063 acres of habitat acquired by the paper company. The land purchased was ecologically-significant threatened habitat on the west shore of Green Bay and has been valued at $3,500,000 to $6,500,000. The habitat acquired was transferred to the State of

Wisconsin and set aside from future development. It will be used to enhance and protect wetland habitat and spawning and nursery areas for fish.

Follow up monitoring of 43 restoration projects previously implemented under the NRDAR Program is on-going; in FY 2004 implementation and monitoring activities were completed under 9 restoration plans. Monitoring may range from visual checks of the restored areas to more quantitative data collection which is useful in determining which restoration techniques are most successful.

The technical expertise of EC specialists is widely sought. EC specialists responded to 333 EPA sites where technical assistance was needed. For example, the Service provided technical assistance to EPA in the development of the remedial investigation/feasibility study (RI/FS) and the ecological risk assessment in partnership with the State, tribes, and NOAA Fisheries at the Portland Harbor Superfund Site. The Site is an approximately 6-mile stretch of the lower Willamette River near Portland listed in 2000 due to sediment contamination with metals, pesticides, and organochlorine and petroleum compounds. As a result of the Service's involvement, the direction of the risk assessment has been changed to incorporate more data collected locally (including data collected by the Service), and provided tools for better protection of trust resources in the harbor that are potentially exposed to contaminants. Trust resources include migratory birds, such as great blue heron and bald eagle (threatened), Pacific lamprey (petitioned for listing), white sturgeon, and several salmon species listed as threatened or endangered. All EC work related to EPA Superfund sites are 100% funded through reimbursable agreements.

Also in FY04, 2,871 requests for EC specialists' technical expertise came from federal, state, and local entities and an additional 1,544 requests came from other FWS programs. Lastly, we provided technical assistance on 619 partnership activities. EC technical assistance provided to states, tribes and local entities are fully funded by the program while 20 to 30 percent of all assistance provided to other Service organizations is funded by reimbursement agreements.

2005 Planned Program Performance

In FY 2005, the EC Program will begin to make the changes necessary to implement realignment of the EC Program that will occur in 2006. These changes will involve shifting our workload and associated outcomes in a number of categories, including reviews of NPDES permits, TMDLs, Pesticide Use Proposals on Refuges, etc. These reductions are detailed below. These relatively minor workload reductions will be offset by increased emphasis on the key performance measures related to our NRDAR program, namely, restoration of wetlands, restoration of streams, and enhanced recreational opportunities for the public. Thus, in 2005 we expect to realize moderate gains in these categories, followed by significantly larger gains in 2006.

Examples of activities with reduced emphasis in FY05 include the following:

- The number of pesticide use proposals reviewed for Refuges will be reduced from 1,508 in FY 2004 to 900 in FY 2005.
- The number of technical assistance projects completed will be reduced from 6,333 in FY 2004 to 6,000 in FY 2005.
- The number of pesticide registration consultations completed will be reduced from 373 in FY 2004 to 250 in FY 2005.
- The total number of Clean Water Act consultations (NPDES, TMDLs, Triennial Reviews) will be reduced from 8,975 in FY 2004 to 8,085 in FY 2005.

Activities that will continue to be the focus of the EC Program in FY 2005 include the following:

- Finalization and implementation of strategic plan measures in support of the Service and Departmental strategic outcome goals.
- Completion of nationwide ESA section 7 consultations on the first group of pollutants for water quality criteria with EPA and NOAA Fisheries. Water Quality Standard consultations with states will also continue.
- Continuation of cooperative efforts with Federal, Tribal, State, Local, Industry, and other partners on assessing threats to trust resources from hazardous waste sites.
- Continuation of numerous cooperative assessments on NRDAR cases to implement restoration activities.
- Maintain the number of contaminant investigations and restorations conducted on Refuges at 2004 levels.
- Continuation of support to primary response agencies (e.g., U.S. EPA and U.S. Coast Guard) on spill responses and contingency planning at FY 2004 levels.
- Maintain natural resource damage assessment activity at FY 2004 levels.
- Increase targets for NRDAR-related restorations for acres of wetlands from 1,000 acres in FY 2004 to 3000 acres in FY 2005. Targets for miles of stream habitat restored will be increased from 10 miles in FY 2004 to 40 miles in FY 2005.

Justification of 2006 Program Changes

Subactivity		2006 Budget Request	Program Changes (+/-)
Environmental Contaminants	(000)	8,486	-2,649
	FTE	*99*	*0*

The FY06 budget request for Environmental Contaminants is $8,486,000 and 72 FTE's; a net program decrease of -$2,649,000 and 27 FTE's. The Program will obtain an additional $2,800,000 from the NRDAR Restoration Fund to fund the 27 FTE's no longer funded by direct appropriation.

EC Activity Details	Proposed Reductions ($ in thousands)
Pre-acquisition Surveys	299
Pesticide Use Proposals	320
National Pollutant Discharge and Elimination System Permit Reviews & Total Maximum Daily Load Reviews	1,000
CERCLA/Superfund Technical Assistance to EPA	400
Internal Technical Assistance (e.g., Project Planning)	200
External Technical Assistance (e.g., to other DOI Bureaus, Federal agencies, tribes, States, NGOs)	200
Patuxent Analytical Control Facility	120
Off-Refuge Investigations	110
TOTAL	**2,649**

General Program Activities (-$2,659,000)

The 2006 budget proposes a realignment of the Environmental Contaminants program, refocusing efforts on restoration activities and emphasizing cooperation with Interior's Natural Resource Damage Assessment and Restoration program. FWS will increase its restoration efforts in

conjunction with the Department's NRDAR program, through expanded use of restoration settlement dollars held in the NRDAR Restoration Fund for new restoration projects. FWS will redirect Environmental Contaminants staff efforts and increase work in support of restoration actions. This realignment of priorities will allow FWS to reduce appropriated funding for the EC program while increasing the number of restored populations of biological resources injured by oil and hazardous substance releases; the numbers of acres restored by 167 percent due to NRDAR related activities; and the number of stream or shoreline miles restored by 175 percent. The specific sites and resources to be restored cannot be determined at this time, since the Regions and NRDAR Program will need to make extensive reviews of the options available, in FY2005, before the proposal can be implemented.

This shift in focus will be accomplished by seeking a minimum of $2,800,000, from the NRDAR Restoration Fund, for salary costs, for the 27 FTE's no longer supported by direct appropriations. The success of this effort will depend on the ability of the Regions and the NRDAR Restoration Program to identify and implement restorations and /or restoration planning that has funding for salaries. This effort is expected to add a restoration capability to the EC Program which will increase restoration activities, by expanding the FWS and Department's ability to leverage additional restoration funds, while also continuing to foster close relationships with other agencies, states and the public.

This change in focus means that some of the tasks routinely completed by field and regional EC biologists such as, pre-acquisition surveys and pesticide use proposal review on the National Wildlife Refuge System, toxicology work with pesticides and Clean Water Act Water Quality Criteria with the Endangered Species program, and technical assistance to States, tribes, and other Federal partners will be reduced. The oil and hazardous substance spill response preparedness program will not be reduced.

Increases to address FY2005 Rescissions (+11,000)
The fiscal year 2005 Omnibus Appropriation (P.L. 108-447) included two across the board rescissions, netting a 1.3 percent reduction to all Service programs. In total, the President's budget includes an increase of $11,000 within Environmental Contaminants to address FY2005 rescissions. Specifically, $2,000 will be restored to the Everglades Restoration efforts; $7,000 would be restored to the Amphibian Contaminants Surveys, and $2,000 would be restored to address Pacific NW Salmon. Collectively, these funds will allow the contaminants program to continue these efforts at the FY2004 funding levels.

Vehicle Reduction (-$1,000)
The 2006 budget proposes a reduction of $1,000 in the Coastal program to recognize expected savings to be achieved through improved fleet management within the Service and across the Department of Interior.

Program Performance Summary

End Outcome Measures	2003 Actual	2004 Actual	2005 Plan	2006 Plan	Change in Performance - 2005 to Planned 2006	Long-term Target (2008)
End Outcome Goal 1.1: Resource Protection. Improve Health of Watersheds, Landscapes, and Marine Resources.						
Intermediate Outcome: Restore and maintain proper function of watershed						
Land Contamination: Number of completed contaminant investigations and restorations on Refuges (BUR)	36	34	36	32	-11 %	32
Land Contamination: Number of pesticide use proposals reviewed (BUR)	1,128	1,508	900	240	- 73 %	240
Land Contamination: Number of technical assistance projects completed (SP)	6,160	6,333	6,500	6,120	- 6 %	6,120
End Outcome Goal 1.2: Resource Protection. Sustain Biological Communities on DOI Managed and Influenced Lands and Waters.						
Intermediate Outcome: Create Habitat conditions for biological communities to flourish						
Habitat Protection: Number of pesticide registration consultations completed (BUR)	212	373	250	200[a]	- 20 %	200
Habitat Protection: Number of CWA consultations (NPDES, TMDLs, Triennial Reviews) (BUR)	14,082	8,975	8,085	1,408	- 90 %	1,408
Habitat Protection: Number of Water Quality Standard Consultations completed (SP,BUR)	6,408	6,852	6,900	6[b]	- 99 %	6
Habitat Protection: Number of completed contaminant investigations (BUR)	10	22	14	12	-10 %	12
Habitat Protection: Number of spill prevention activities and spill responses (SP)	450	11,859	500	400	-20 %	400

Habitat Protection: Number of ongoing NRDAR cases and final Settlements (NA)	223	316	250	250	0 %	220
Habitat Protection: Number of biological populations restored due to NRDAR (SP)	2	2	2	3	+ 50 %	4
Habitat Protection: Number of acres restored due to NRDAR (SP)	1,000	1,000	3,000	8,000	+ 167%	10,000
Habitat Protection: Number of stream/river miles restored (SP)	10	10	40	70	+ 175%	90
End Outcome Goal: Recreation. Improve Access to Appropriate Recreation Opportunities on DOI Managed or Partnered Lands and Waters						
Recreational Opportunities: Number of settlements having a recreational component (SP)	10	10	12	18	150 %	20